FILE

Frank L. O'Bannon Governor

Gregory A. Wilson, M.D. State Health Commissioner



June 3, 2002

Mr. James Duininck
Prinsco, Inc.
P. O. Box 287
108 Highway 7 West
Prinsburg, MN 56281-0265

Dear Mr. Duininck:

Re: Prinsco Gravelless Pipe Technology Eight (8) Inch, Ten (10) inch Goldline GLP Gravelless Pipe with GLP Non-woven and Knitted Fabric for the pipe sock

The use of Prinsco Goldline GLP Gravelless Pipe as a gravelless system is hereby approved by the Indiana State Department of Health (department) subject to the conditions listed below.

The gravelless system for which you submitted information is a subsurface absorption system, which provides an alternative to the use of gravel in the absorption field trenches. This is accomplished by the installation of either eight or ten inch inside diameter corrugated polyethylene plastic pipe in a narrow trench, which is backfilled with soil, rather than with gravel and then soil. This piping is provided with two rows of drain holes, 3/8 to 1/2 inch in diameter, located 120 degrees off the top centerline. The holes are staggered with one hole per corrugation. The piping is wrapped with GLP Non-woven, translucent gray, continuous monofilament fiber, spun-bonded polypropylene geotextile fabric or Knitted white polyester fabric.

As stated in your literature, this gravelless system is designed to be installed in any application where a conventional gravel-filled system is allowed. It is not intended for use in areas where conventional gravity feed trickle flow systems would be prohibited due to poor permeability, high groundwater, insufficient depth to bedrock or other limiting layer, or other limitations for conventional systems.

Approval of the use of Prinsco Goldline GLP Gravelless Pipe is subject to the following conditions:

- 1. The Prinsco Goldline GLP Gravelless Pipe is to be used only in gravity flow subsurface trench and gravity flow alternating subsurface trench soil absorption field systems.
- 2. The Prinsco Goldline GLP Gravelless Pipe cannot be used with or in lieu of flood dose or pressure distribution subsurface trench soil absorption field systems.
- 3. A permit for each individual system must be obtained from the health department having jurisdiction prior to the construction of the system.
- 4. The pipe must meet the standards of ASTM F667.

- 5. The fabric sock used with the gravelless pipe must meet the ASTM standards for geotextile nonwoven and knitted fabric stated in Prinsco's Technical Memorandum 2.012 dated June 7, 2001.
- 6. The absorption field size must be calculated using the design daily flow and the soil loading rates for subsurface absorption systems set by Indiana State Department of Health Rule 410 IAC 6-8.1 or 6-10, whichever is applicable. The following substitution of pipe for trench bottom is permitted:
  - a. At least one lineal foot of ten-inch diameter gravelless pipe must be required for each lineal foot of three-foot wide gravel-filled trench that would be required.
  - b. At least one lineal foot of eight inch diameter gravelless pipe must be required for each lineal foot of two-foot wide gravel-filled trench that would be required.
- 7. Each Goldline GLP gravelless pipe soil absorption field trench must be individually connected to the distribution box by at least five (5) feet of gravity effluent sewer four (4) inch pipe.
- 8. The distal ends of the Goldline GLP gravelless pipe soil absorption field trenches may not be manifolded together.
- 9. The Goldline GLP alignment stripe must be installed at the top center of the pipe.
- 10. The Goldline GLP gravelless pipe must be level throughout its length.
- 11. The trench excavation for the eight-inch pipe must be at least sixteen (16) inches in width with the gravelless pipe installed in the center of the trench.
- 12. The trench excavation for the ten-inch pipe must be at least twenty (20) inches in width with the gravelless pipe installed in the center of the trench.
- 13. The gravelless pipe must be covered with a minimum of twelve (12) inches of soil material.
- 14. The use of gravelless systems shall meet all other applicable Indiana State Department of Health standards for residential and commercial subsurface soil absorption systems.
- 15. All determinations for site suitability for subsurface soil absorption systems shall be made using procedures and criteria established by the Indiana State Department of Health.

If you have any questions regarding this approval, please contact Ed Miller, Alan Dunn, David Ortel, or Chris Bourke, of my'staff at the above address, by telephone at 317-233-7177, or by e-mail (adunn@isdh.state.in.us, cbourke@isdh.state.in.us, or dortel@isdh.state.in.us, respectively).

Sincerely,

HOWARD W. CUNDIFF, P. E., DIRECTOR

CONSUMER PROTECTION

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cc: Local Health Departments

Onsite Staff